

Notice of Allowability

Application No.

09/991,761

Examiner

Brij B Shrivastav

Applicant(s)

SAVELAINEN, MATTI KULLERVO

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to February 9, 2004.
2. ☒ The allowed claim(s) is/are 1-13, 15 and 17-20.
3. ☒ The drawings filed on 02 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

1. Applicant's amendment dated February 9, 2004 has been received and entered.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney Thomas Lundin on April 15, 2004. Accordingly, claim 16 has been canceled, and claim 15 has been amended as follows:

Claim 15 (currently amended) A radio frequency receive coil assembly for receiving circularly polarized resonance signals in a magnetic resonance imaging system, the radio frequency receive coil assembly comprising:

a substantially planar substrate; and an array of quadrature coils disposed on the substrate, each quadrature coil comprising a first loop portion disposed on a first surface of the substrate and a second loop portion disposed on a second surface of the substrate, the second surface being opposite the first surface; wherein adjacent quadrature coils in the array are disposed relative to one another such that there is substantially no mutual inductance between the adjacent coils.

REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance:

Claims 1-13 are allowed, as the prior art of record does not teach a magnetic resonance imaging apparatus and method, including an array of quadrature coils

disposed on a substrate, each quadrature coil comprising a loop portion disposed on a first surface of the substrate and a second loop portion disposed on a second surface of the substrate, such that there is substantially no mutual inductance between adjacent quadrature coils of the array, in combination with the remaining limitations of the claims.

Claims 15, and 17-20 are allowed, as the prior art does not teach or suggest a radio frequency receive coil assembly for receiving circularly polarized resonance signals in a magnetic resonance imaging system, the radio frequency receive coil assembly, including an array of quadrature coils disposed on a substrate, each quadrature coil comprising a loop portion disposed on a first surface of the substrate and a second loop portion disposed on a second surface of the substrate, the second surface being opposite to the first surface, in combination with the remaining limitations of the claims.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brij B Shrivastav whose telephone number is 571-272-2250. The examiner can normally be reached on 7 AM to 4 PM.

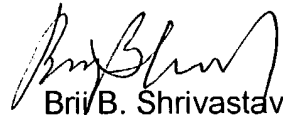
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. F. Gutierrez can be reached on 571-272-2245. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bbs
April 15, 2004


Brij B. Shrivastav
Patent Examiner